

MATHEMATICS

Quarter 1 - Module 3

Describing and Drawing the Effect of One-Direction Multi-Step Slide or Translation in Basic Shapes and Figures



MATHEMATICS - Grade 2

Quarter 1 - Module 3 Describing and Drawing the Effect of One-Direction Multi-Step Slide or Translation in Basic Shapes and Figures

Self-Learning Module (SLM)

MATATAG Curriculum

First Edition, 2025

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Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are clearly stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

A Pre-test is provided to measure your prior knowledge on lessons in each SLM. This will tell if you need to proceed on completing this module, or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teachers are also provided to the facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. Read carefully the instructions before performing each task.

If you have any questions in using this SLM or any difficulty in doing the tasks in this module, do not hesitate to consult your teachers or facilitator.

Thank you.

For the learner

Welcome to the Mathematics - Grade 2 Self-Learning Module (SLM) on Describing and Drawing the Effect of One-Direction Multi-Step Slide or Translation in Basic Shapes and Figures!

In this learning resource, you will have the opportunity to enjoy and successfully achieve relevant competencies at your own pace.

This module offers fun and meaningful opportunities for both guided and independent learning. You will engage with the material and become an active participant in your learning journey.

This module has the following parts and corresponding icons:



What I Need to Know

This gives you an idea of the skills or competencies you are expected to learn in the module.



What I Know

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correctly, you may decide to skip this part.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What's New

In this portion, the new lesson is introduced to you in various ways such as through a story, a song, a poem, a problem opener, an activity or a situation.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What's More

This comprises activities for independent practice to concretize your understanding and skills about the topic. You may check the answers to the exercises using the Answer Key at the end of the module.



What I Have Learned

This includes questions or blank sentence/ paragraph to be filled in to process what you learned from the lesson.



What I Can Do

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or events.



Assessment

This is a task which aims to evaluate your level of mastery in achieving the learning competency.



Additional Activities

In this portion, another activity is given to you to enrich your knowledge or skill of the lesson learned. It also ensures retention of learned concepts.

Answer Key

This contains answers to all activities in the module.

At the end of this module, you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Avoid unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Answer *What I Know* before moving on to the other activities included in the module.
3. Carefully read the instructions before doing each task.
4. Observe honesty and integrity in doing the tasks and in checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in doing the tasks in this module, consult your teacher or facilitator. Always bear in mind that you are not alone. We hope that through this material, you will experience meaningful learning and gain a deep understanding of the relevant competencies.

For the facilitator

Welcome to the Mathematics - Grade 2 Self-Learning Module on Describing and Drawing the Effect of One-Direction Multi-Step Slide or Translation in Basic Shapes and Figures!

The Curriculum Implementation Division (CID) through the Learning Resource Management Section (LRMS) launched this module in cooperation with the Division's Teacher Developers, Learning Resource Evaluators (LREs), Information and Technology Officer, and subject matter experts in Mathematics and English. This has been especially developed, quality-assured, and validated to enable you to help the learners overcome their educational obstacles—personal, social, and economic—while meeting the standards outlined in the MATATAG Curriculum.

This learning resource hopes to engage the learners in guided and independent learning activities. It further aims to help them acquire the needed 21st century skills while taking into consideration their needs and circumstances.

As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of their progress while allowing them to manage their learning. In addition, you are enjoined to encourage and assist the learners as they do the tasks contained in the module.

MATHEMATICS

Quarter 1 - Module 3

Describing and Drawing the Effect of One- Direction Multi-Step Slide or Translation in Basic Shapes and Figures



What I Need to Know

This module was designed and written to help you master the basic shapes and figures. The scope of this module can be used in many different learning situations. The language used was adjusted to the diverse vocabulary level of learners.

After using this module, you are expected to:

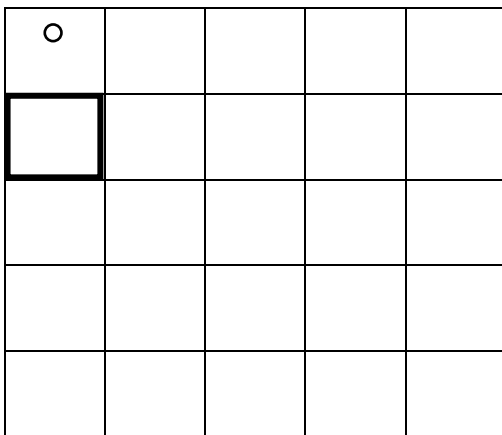
- Describe and draw the effect of the one-direction multi-step slide or translation in basic shapes and figures.
- Describe the change in the position of a basic shape or figure after a one-step flip is performed; and
- Describe the change in the position of a basic shape or figure after a multi-step slide and/or flip is performed.



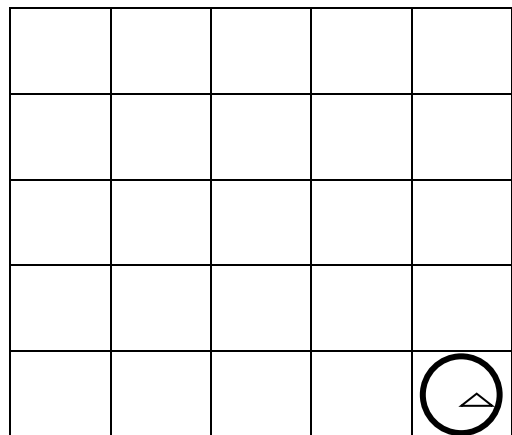
What I Know

Directions: Slide, flip, and draw the figures in their new position according to the given distance and direction.

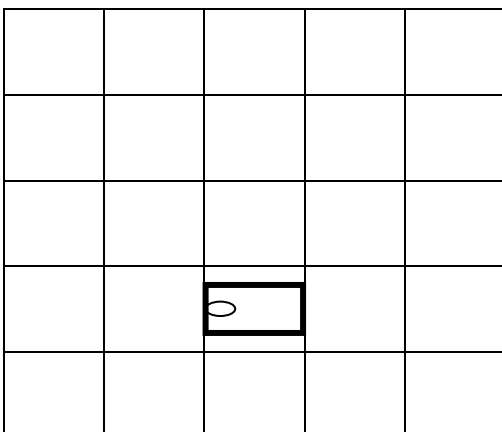
1. Slide the square 2 cells downward.



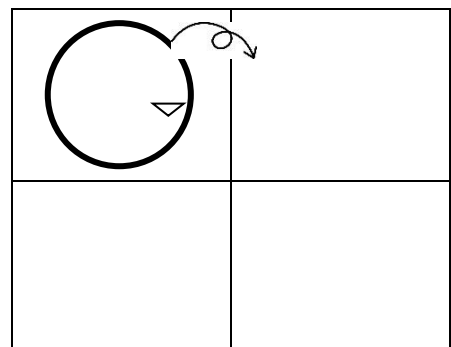
2. Slide the circle 3 cells upward.



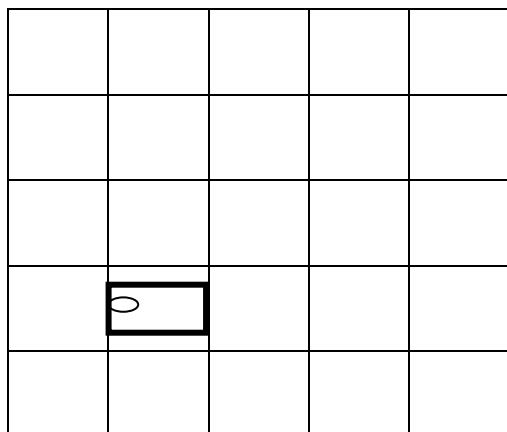
3. Slide the rectangle 1 cell to the right.



4. Flip and draw the figure according to the direction of the arrow.



5. Flip the rectangle to the right and slide it 2 cells to the right.

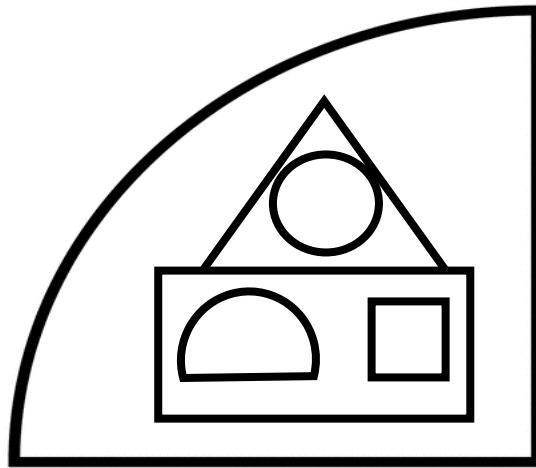


Lesson 1 - Describe the change in the position of a basic shape or figure after a one-step slide or translation is performed



What's In

Name It!



What shapes are in the illustration? List the names of the shapes in the illustration above. Write your answer in the blank.

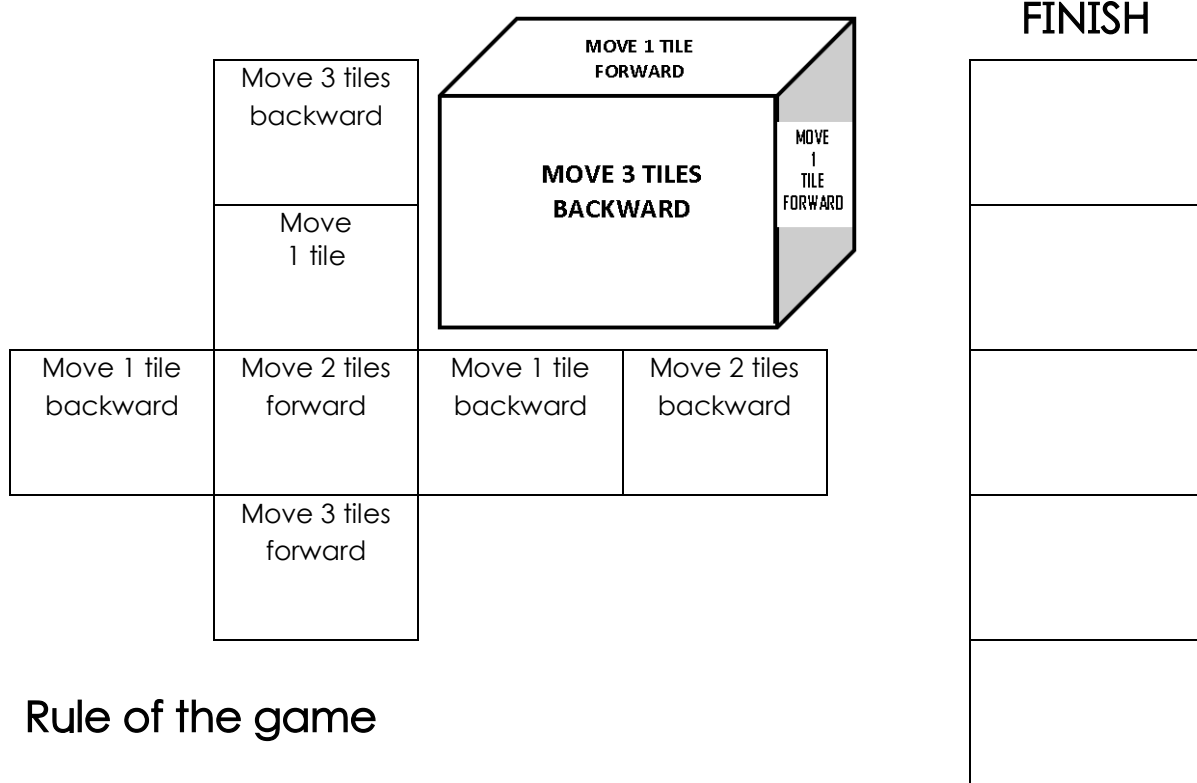
Example: Half-circle



What's New

Let's Play

You will be playing a game. With the help of your parent/guardian make a paper dice.



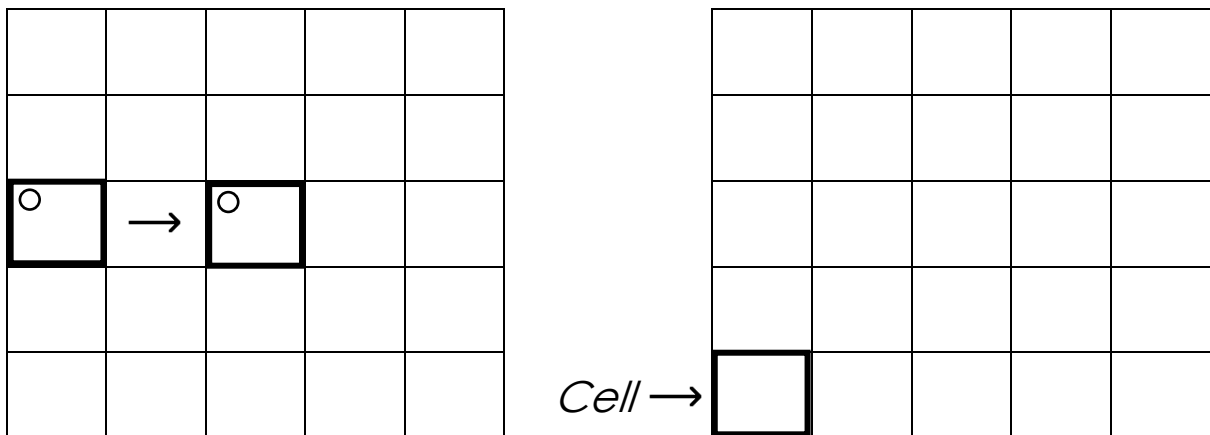
Rule of the game

- Roll the dice three times, alternately.
Move according to the command shown on the dice, until you reach the finish line.

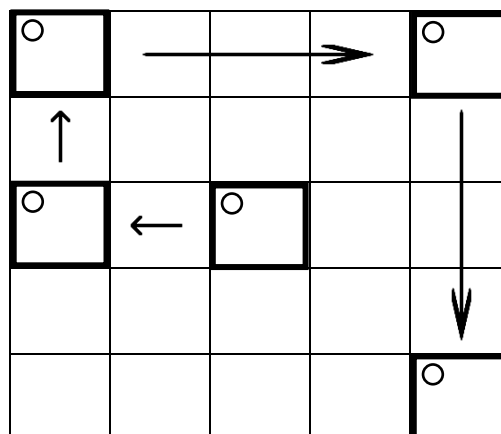


What is It

A **Slide or translation** involves moving the shape or object a certain distance in a specified direction. A slide involves moving a shape from one position to another without changing its orientation or appearance.



The \rightarrow drawn to demonstrate the sliding movement of the shape or figure, with the arrowhead pointing to the direction where the shape moved.



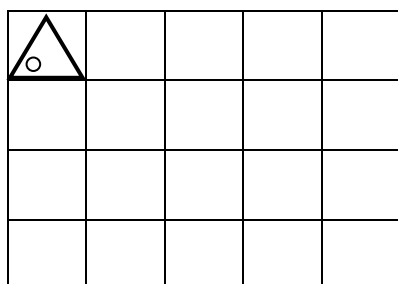


What's More

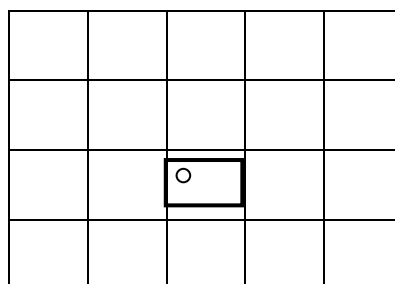
Sliding of Shapes or Figures

Directions: Slide the figure according to the given distance and direction. Draw it in its new position.

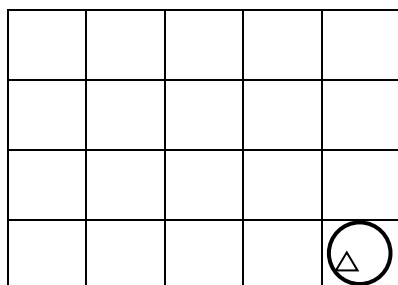
1. Slide triangle 3 cells downward.



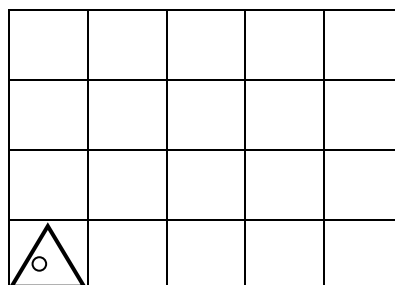
2. Slide rectangle 2 cells to the right.



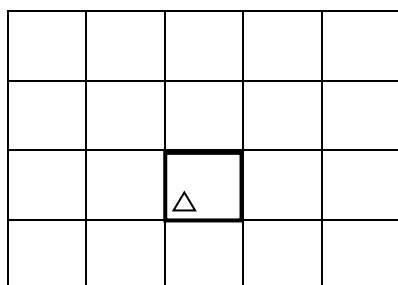
3. Slide circle 3 cells to the left.



4. Slide triangle 2 cells upward.



5. Slide square 2 cells to the left.





What I have learned

A _____ or _____ involves moving the _____ or object a certain distance in a specified direction. The _____ is drawn to demonstrate the sliding movement of the shape or figure.

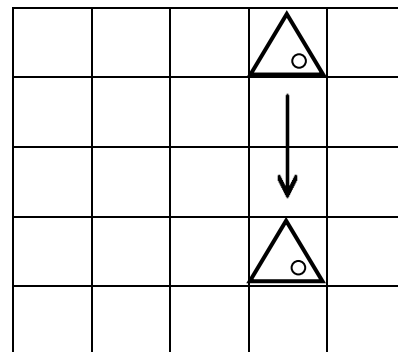


What I can do

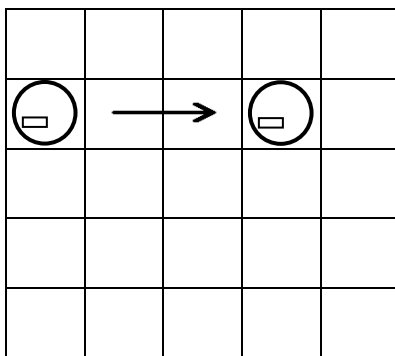
Here is another activity that lets you apply what you have learned about the sliding of shape. Study this example.

Example:

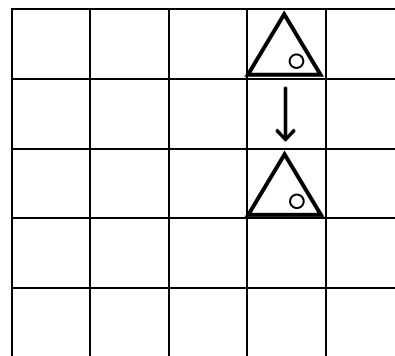
The triangle slides 2 cells downward.



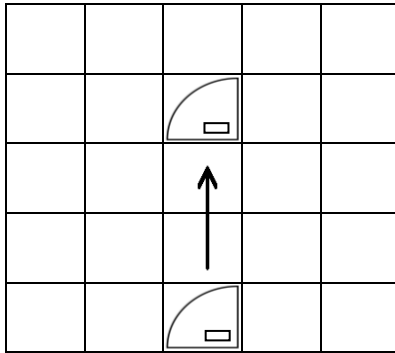
Directions: Fill in the blanks with the number of cells and the direction of the slide performed on the shape.



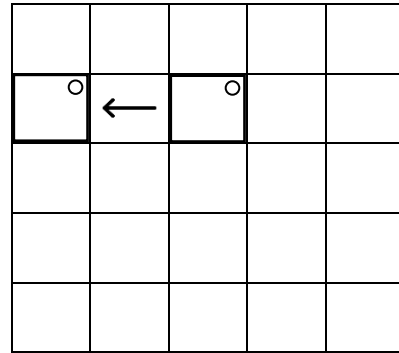
1. The circle slides _____ cells _____.



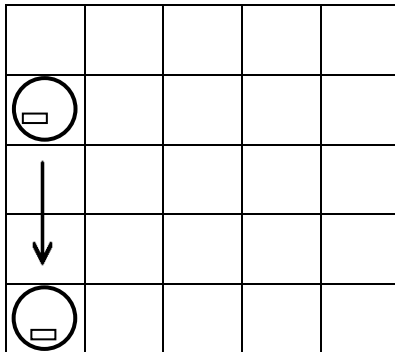
2. The triangle slides _____ cells _____.



3. The quarter circle slides ____ cells ____.



4. The square slides ____ cells ____.



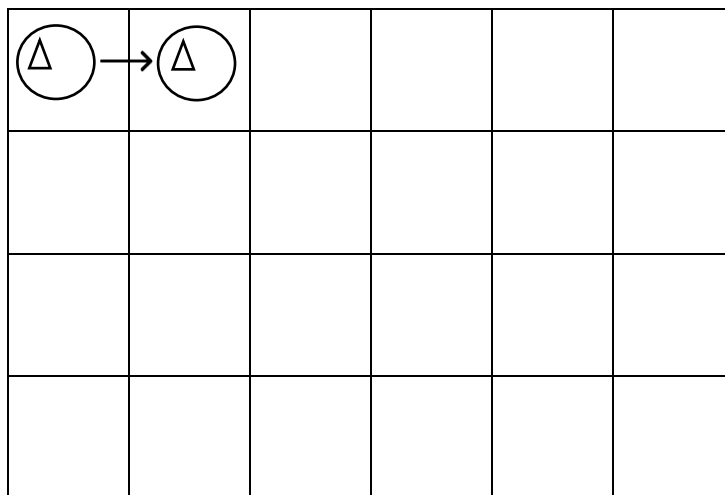
5. The circle slides ____ cells ____.

Lesson 2 - Describe the change in the position of a basic shape or figure after a one-step flip is performed



What's In

Let us study this illustration.

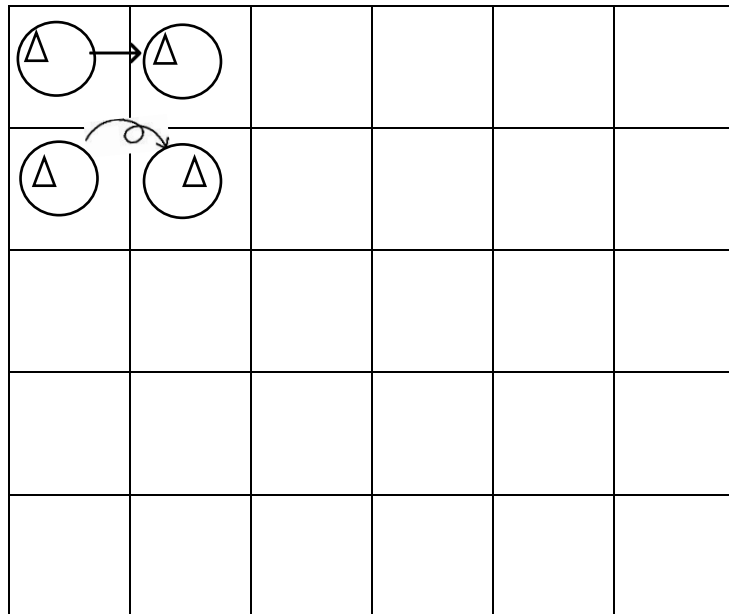


1. What movement was performed to the cut out?
2. What has changed in the position of the circle after a slide was performed?



What's New

Study this illustration. Observe the two circles, before and after the movement was performed.



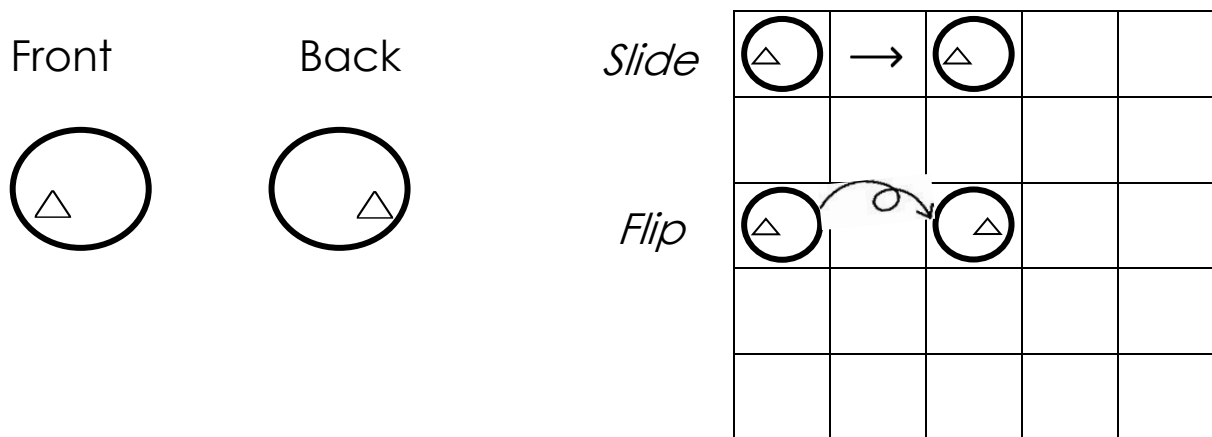
1. What has changed in the position of the circle after it was moved?
2. What happened with the position of the triangle inside the circle?
3. What remained the same in the circle after it was moved?
4. Do you think a slide was performed on the circle?



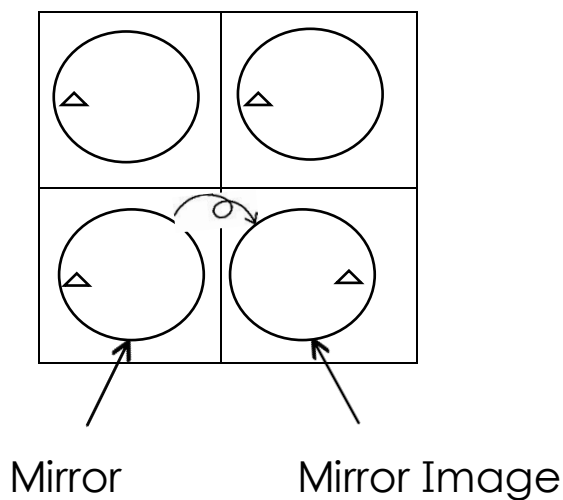
What is It


A **flip** involves turning the shape over in a specified direction to create a mirror image.

Study the illustrations.



A **flip** produces a mirror image of a shape or figure by turning it over.



The  drawn to show the flipping movement of the shape or figure, with the arrowhead pointing to the direction where the shape flipped.

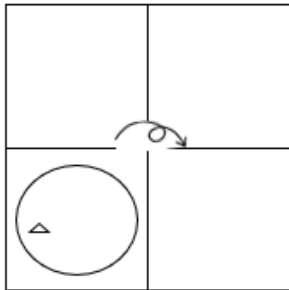


What's More

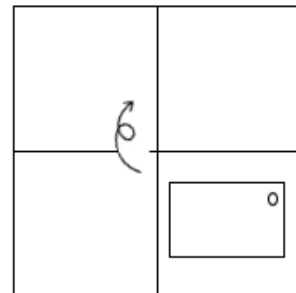
Flipping of Figures

Directions: Flip and draw the figure according to the direction of the arrow.

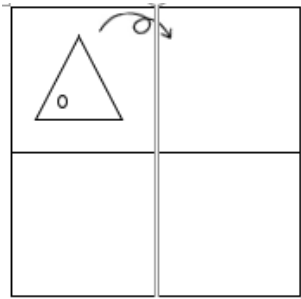
1.



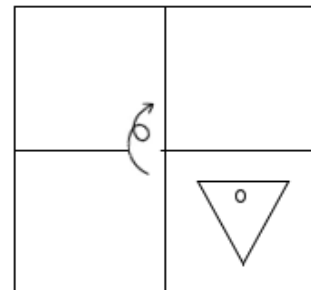
2..



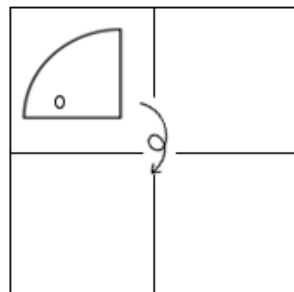
3.



4.



5.



Congratulations! You did a good job!





What I have learned

Here is another activity that lets you apply, what you have learned in flipping.

Directions: Complete the paragraph below. Choose your answer from the word bank.

Word Bank

direction	turning	flip
		

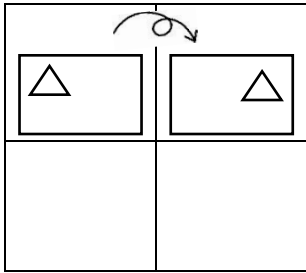
A _____ involves _____ the shape over in a specified _____ to create a mirror image.

The _____ is drawn to show the flipping movement of the shape or figure, with the _____ pointing to the direction where the shape flipped.



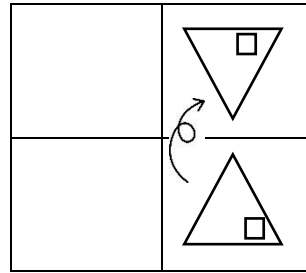
What I can do

Directions: Fill in the blank with the direction of the flip performed on the shape. Write the following directions **to the right**, **upward**, **to the left**, and **downward** in the blank.



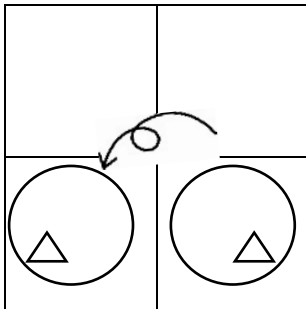
1. The rectangle flips

_____.



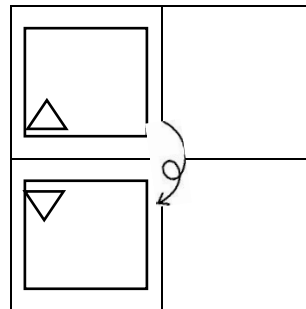
2. The triangle flips

_____.



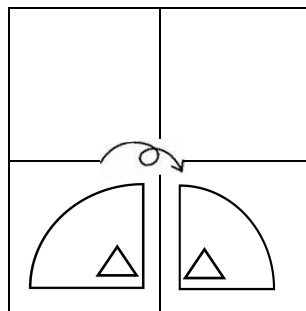
3. The circle flips

_____.



4. The square flips

_____.



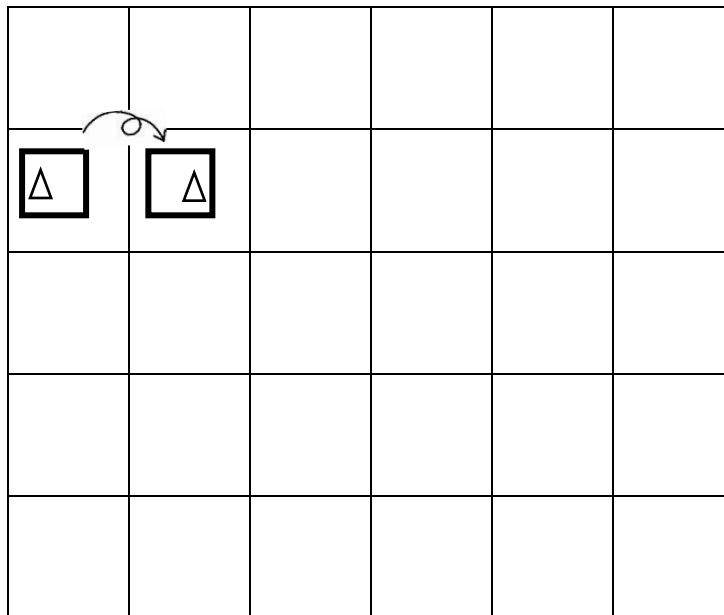
5. The quarter circle flips _____.

Lesson 3 - Describe the change in the position of a basic shape or figure after a one-step flip is performed



What's In

Observe the two squares, before and after the movement was performed.

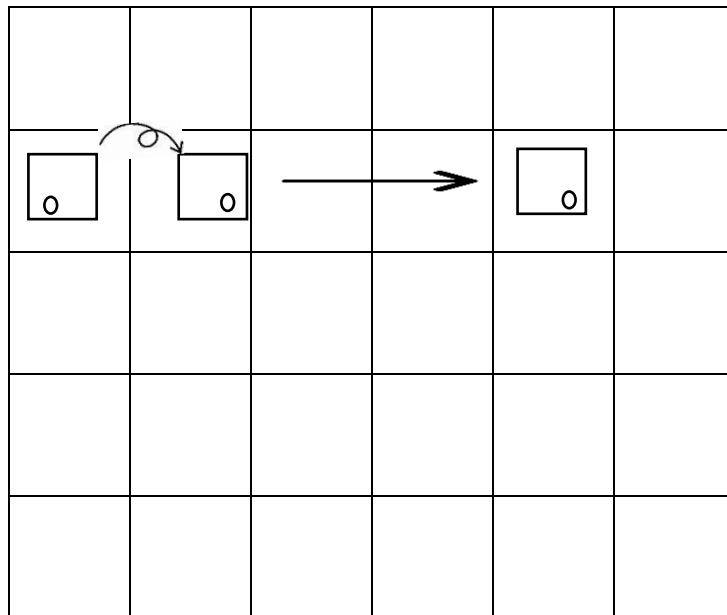


1. What movement was performed to the cut out?
2. What has changed to the position of the shape after a flip was performed?



What's New

Observe the three squares, before and after the movement was performed.

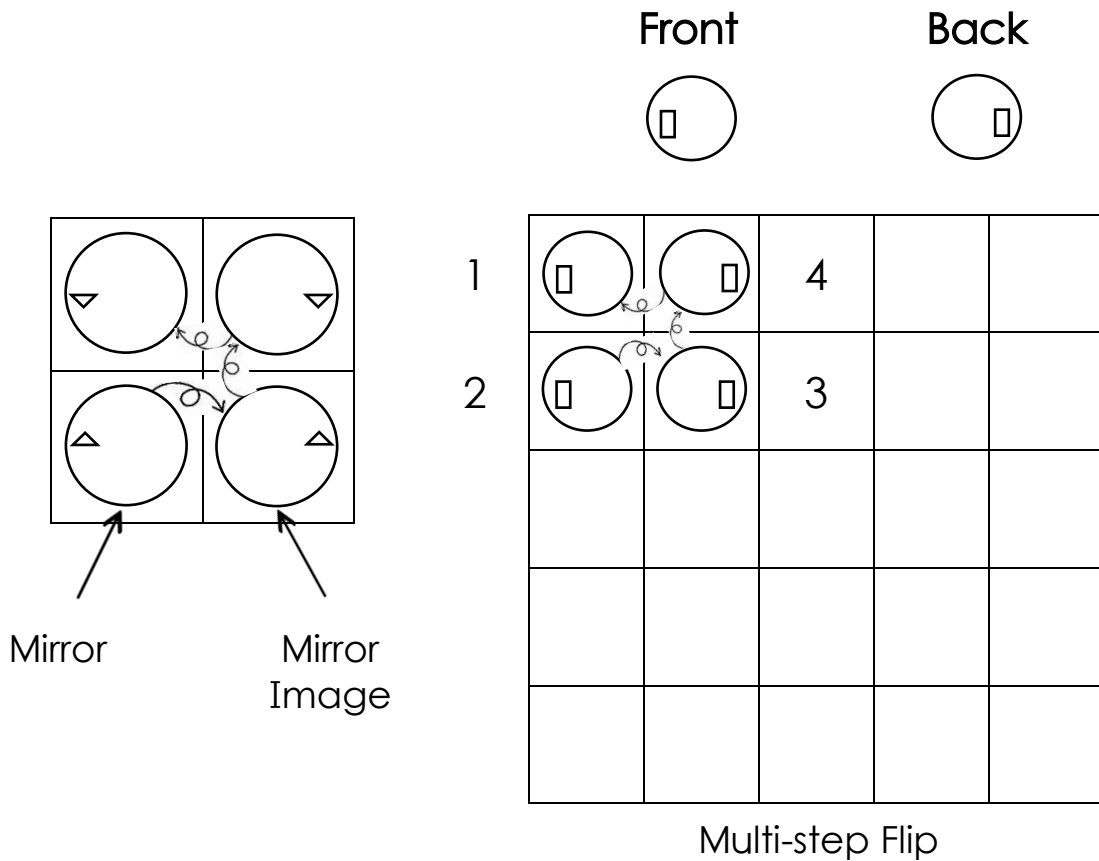


1. What has changed in the position of the square after it was moved?
2. What happened with the position of the circle inside the square?
3. What remained the same in the square after it was moved?
4. Do you think a slide and a flip was performed on the square?

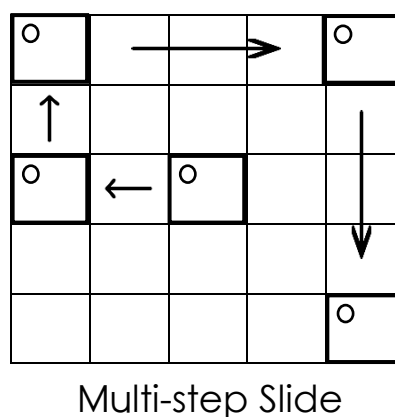


What is It

Directions: If the circle is flipped to the right, then upward, and if you flip it again to the left the resulting figure matches the original.



A Multi-step slide or flip can slide many times, can flip many times, and combine slides and flips in a multi-step process.



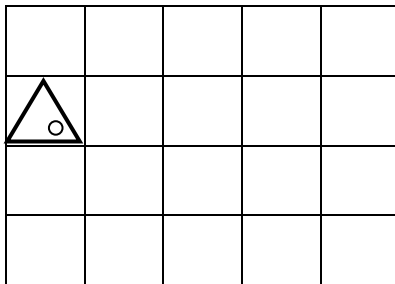


What's More

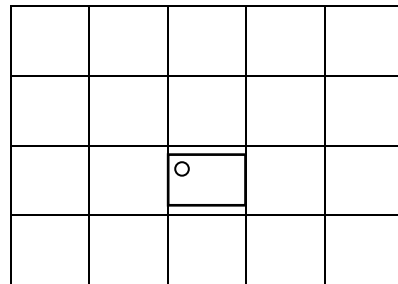
Sliding and flipping of figures

Directions: Draw the figure in its new position following the given movements.

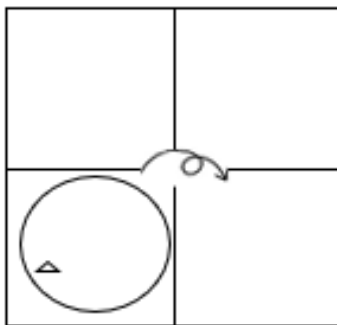
1. Slide triangle 2 cells downward.



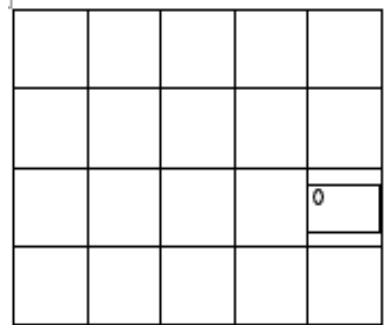
2. Flip rectangle 2 cells to the right.



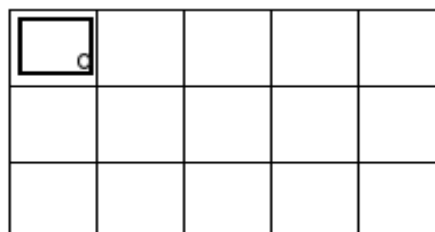
3. Flip and draw the figure according to the direction the arrow.



4. Slide the rectangle of three cells to the left of and flip it to the left.



5. Slide the square 2 cells downward and flip it to the right





What I have learned

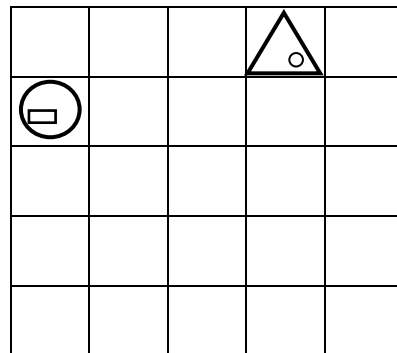
A _____ slide or flip can _____ many times, can _____ many times, and combine slides and flips in a multi-step process.



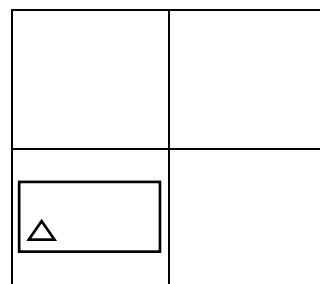
What I can do

Directions: Draw the resulting figure after following the given instructions on movement.

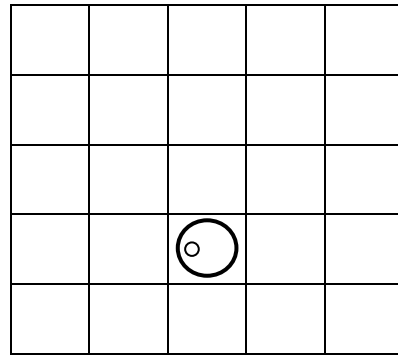
1. a. Slide the circle 4 cells to the right.
b. Slide the triangle 3 cells downward.



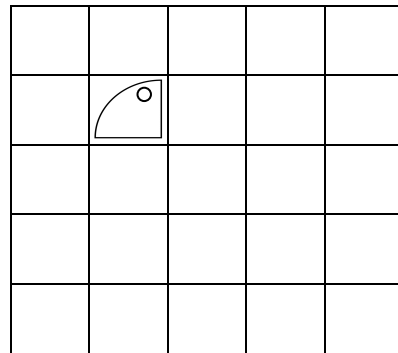
2. Flip the rectangle to the right and slide one cell to the right.



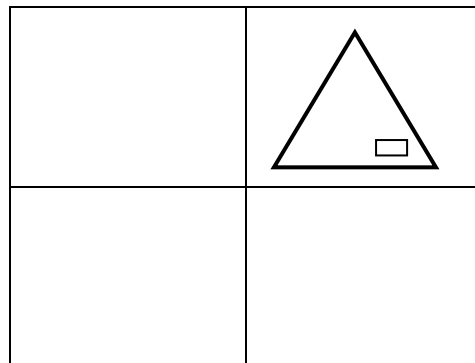
3. Slide the circle 2 cells to the left and slide one cell upward.



4. Slide the quarter circle 2 cells to the right and flip it to the right.



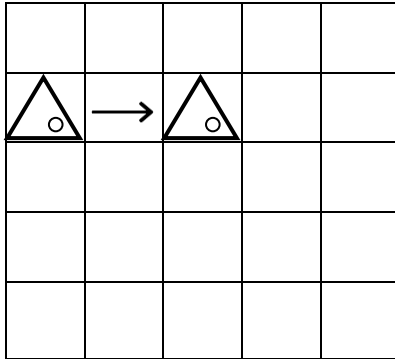
5. Flip the triangle to the left and slide one cell downward.



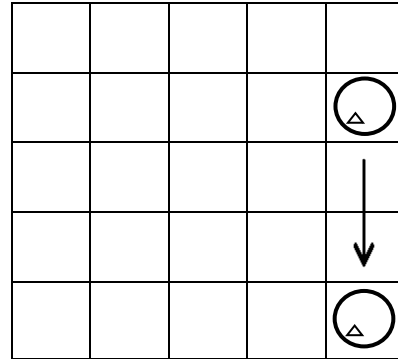


Assessment

I. Fill in the blanks with the number of cells and the direction of the slide performed on the shape.

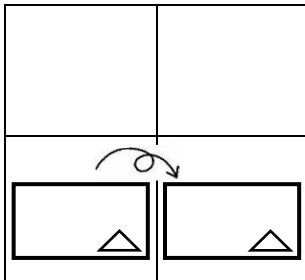


1. The triangle slides _____
cells _____.

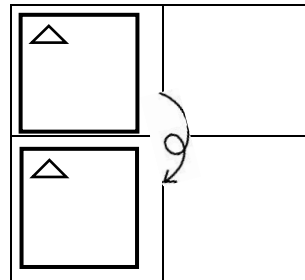


2. The circle slides _____
cells _____.

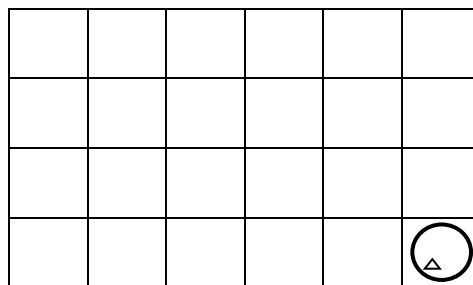
II. Fill in the blanks with the direction of the flip performed on the shape.



3. The rectangle flips _____.



2. The square flips _____.



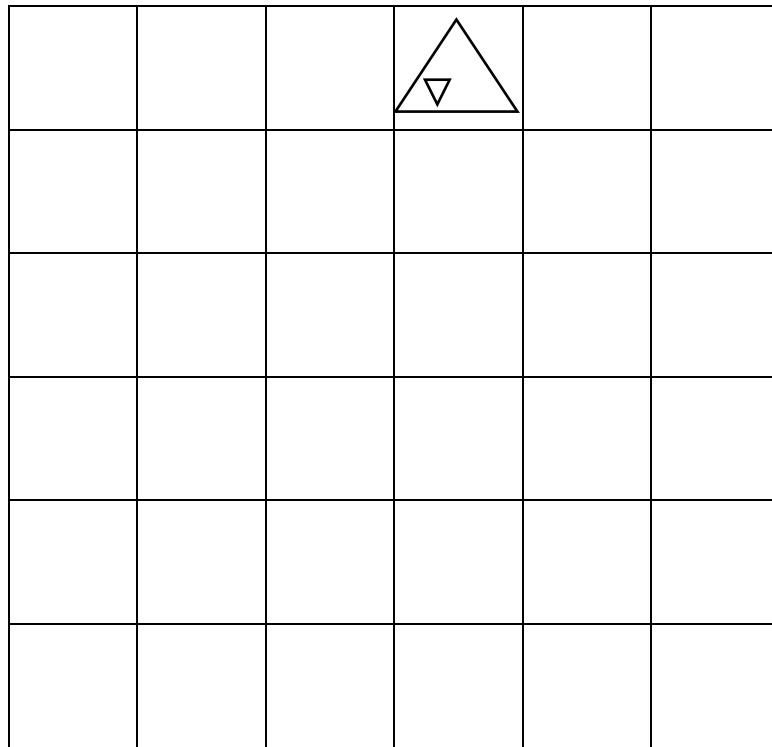
5. Slide the circle of three cells to the left and flip to the left.



Additional Activities

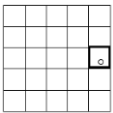
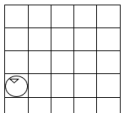
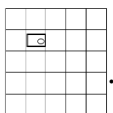
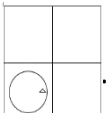
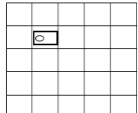
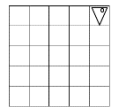
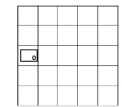
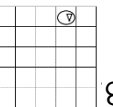
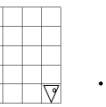
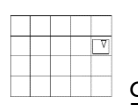
Do the following:

- Flip the triangle downward.
- Slide it three cells downward.
- Slide it again one cell downward.
- Draw the triangle in its new position.

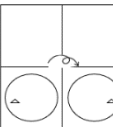
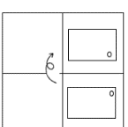
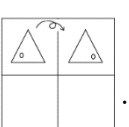
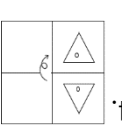
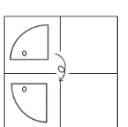


Answer Key

LESSON 1

<p>Lesson 1</p> <p>What's In</p> <p>Square Triangle rectangle Quarter Circle circle</p>	<p>What I Know</p> <p>1.  2.  3.  4.  5. </p>
<p>Lesson 1</p> <p>What's New</p> <p>The answer will depend on the commands performed from rolling the die</p>	<p>What's More Lesson 1</p> <p>1.  2.  3.  4.  5. </p>
<p>What I Have Learned</p> <p>Direction, turning, flip</p>	<p>What's I Can Do</p> <p>3 cells 3 cells 2 cells 1. to the right 2. Downward 3. upward 4. To the left 2 cells 3 cells 5. downward</p>

LESSON 2

<p>What's In</p> <p>The circle slid one cell to the right. The appearance of the circle remained the same.</p>	<p>What's More</p> <p>1.  2.  3.  4.  5. </p>
<p>What's New</p> <p>The position of the triangle inside the circle was changed. The size of the circle remained.</p>	<p>What's I Can Do Lesson 1</p> <p>1. to the right 2. upward 3. To the left 4. downward 5. to the right</p>
<p>What I Have Learned</p> <p>Lesson 1 Slide translation shape</p>	

LESSON 3

What's In
Flip
The triangle inside the square changed its position.

What's More

- 1.
- 2.
- 3.
- 4.
- 5.

What I Have Learned
Multi-step, slide, flip

What's I Can Do

- 1.
- 2.
- 3.
- 4.
- 5.

Additional Activities

Assessment

- 1.
2. to the right
3. to the right
4. downward
- 5.

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DISCLAIMER

This Self-learning Module (SLM) in **MATHEMATICS 2 Quarter 1 Module 3** titled **“Describing and drawing the effect of one-direction multi-step slide or translation in basic shapes and figures”** was developed by SDO Tacurong with the primary objective of preparing for and addressing the demands of the MATATAG Curriculum. Contents of this module were based on DepEd’s Learning Competencies anchored on the MATATAG Curriculum. This is a supplementary material to be used by all learners of Tacurong City in all public schools beginning SY 2024-2025. The process of LR development was observed in the production of this module. This is version **1.0**. We highly encourage feedback, comments, and recommendations.

For inquiries or feedback, please write or call:

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